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COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

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THE EFFECTIVENESS OF EXTENSION

IN REACHING NEGRO FARMERS

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Scope of Study

The Extension studies made in Georgia and Arkansas* include records from all of the negro farms and homes located in representative areas of these two States and furnish data showing the extent to which negro farmers

*M. C. Wilson, and J. K. Giles, The Effectiveness of Extension in Reaching Rural People, Georgia Extension Bulletin No. 319.

M. C. Wilson and T. Roy Reid, The Effectiveness of Extension in Reaching Rural People, Arkansas Extension Circular No. 221.

and home makers have been induced to accept the information made available to them through the extension service, and the relative effectiveness of the means and agencies used in forwarding the work.

Carrol, Elbert, Sumpter, and Washington Counties, Georgia, and Lee County, Arkansas, are represented in this study. The number of records included from each State is about equally divided.

General Information Regarding Farms and Homes Included in This Study

Only one-fourth of the negro farmers owned the farms they operated. (Table 1). The remaining three-fourths were tenants, largely on a share crop basis. The average size of these farms was 51 acres with an average of 39 acres under cultivation. Less than one per cent of the homes had telephones. Twenty-seven per cent of the farmsteads were located on improved roads and 73 per cent on unimproved roads. The average distance from the county extension office was about 8 miles;

Table 1. - General information relating to farms included in study

Item	Number	Percentage
Records obtained	462	---
Farms operated by owners	113	24
Farms operated by tenants	349	76
Average total acreage	51	--
Average acreage under cultivation	39	--
Farms having telephones	4	.9
Farms located on improved roads	127	27
Farms located on unimproved roads	335	73
Average distance from county extension office.	7.8	--

Membership in Farm and Home Associations

Home makers' clubs led in membership with 19 per cent of the farm homes represented. (Table 2). Men's community clubs followed with 11 per cent of the farmers enrolled. Six per cent of the farmers and farm women were members of some other organization such as the cotton and peanut growers' association and farmers' union.

Table 2. -

Membership in farm and home associations

Item	Total
Members in community clubs (men)	50
Percentage of all farmers	11
Members in home makers' clubs	89
Percentage of all homes	19
Members in miscellaneous clubs	27
Percentage of all farmers	6

Participation in Extension Activities and Contact With
Extension Workers

It was found in the case of 8 per cent of the negro farms visited that some member of the family had served as a local leader in the community to further some phase of the extension program. (Table 3). Some formal activity such as a method demonstration meeting had been held on more than one-third of the farms and an additional one-third of the farmers or home makers reported that they had attended such activities on their neighbors' farms. Seventy-five per cent of the farms had made some contact with a member of the extension staff, 65 per cent with the county agricultural agent, 59 per cent with the home demonstration agent, and 6 per cent with subject matter specialists. In nearly all cases, these contacts were made with the negro extension agents. Boys and girls from one-fourth of the homes were or had been enrolled in club work.

Table 3. - Participation in extension activities and contact with
extension workers

Item	Number	Percentage
Farm and home records obtained	462	--
Farms contributing local leaders	39	8
Farms on which extension activities were conducted.	170	37
Other farms participating in extension activities..	139	30
Farms with club work	114	25
Farms reporting contact with extension workers	345	75
Farms reporting contact with county agent	301	65
Farms reporting contact with home demonstration		
, agent	272	59
Farms reporting contact with specialists	26	6

Farms and Homes Reporting the Adoption of New Practices

As the result of extension teaching three-fourths of the farms or homes had adopted one or more improved practices. (Table 4). The average per family was 3.4. More farmers than farm women were applying these new methods in their work, the percentages being 65 and 44 respectively. The average number of farm practices changed was 2.4 which was also slightly greater than the number changed in the home.

Table 4.- Farms and homes reporting the adoption of new practices

Item	Total
Farm and home records obtained	462
Farms changing some practice	340
Per cent farms reporting some changed practice .	74
Total number practices changed	1,171
Average number practices changed	3.4
Farms reporting changed agricultural practices..	302
Per cent farms reporting changed agricultural practices	65
Total number agricultural practices changed	731
Average number agricultural practices changed ..	2.4
Homes reporting changed home economics practices.	205
Per cent homes reporting changed home economics practices	44
Total number home economics practices changed ..	440
Average number home economics practices changed.	2.1

Types of Methods Which Influenced the Adoption of Farm and Home Practices and the Extension Agents Involved

An effort was made to ascertain which of the various extension methods had been influential in bringing about the adoption of each improved practice reported. In the majority of cases these methods were clearly defined in the minds of the people concerned. In some instances certain individual methods seemed to have had a predominant affect while in others a number of methods were thought to have been contributing influences. In a few cases the direct means responsible for improvements credited to extension were too remote to be recalled.

The methods commonly employed in extension teaching may be roughly grouped into three classes: (Table 5) (1) The publicity group, including general meetings, bulletins, circular letters, news stories and such means as broadcast the information which extension has to offer; (2) The personal-

service group including farm and home visits, office calls, correspondence, and similar means which render individual assistance to farmers and farm women; (3) The object-lesson group including adult and junior result demonstrations and method demonstrations which furnish proof that the practices advocated are applicable locally. The influence of publicity methods was reported by 50 per cent of the farms and in connection with 34 per cent of the practices adopted. Personal-service methods were found to have brought about the adoption of 33 per cent of the improved practices or contributed with other methods to that end. Forty-nine per cent of the farms were involved by the improved practices adopted through personal service. The influence of the object-lesson group was much greater, both in the percentage of farms reached and the percentage of practices adopted, than that of either the publicity or the personal-service group. Thirty-four per cent of the farmers and home makers adopted improved practices due to the indirect spread from their neighbors. Only 18 per cent of the practices changed were chargeable to this means. Both of these percentages are lower than the corresponding percentages for the three method groups.

Of the 340 farmers who changed some practice 87 per cent mentioned the influence of the county agricultural agent, 62 per cent the home demonstration agent, 3 per cent the subject-matter specialists, and 17 per cent the local leaders. The county agricultural agents were involved in the adoption of 60 per cent of the 1,171 practices, the home demonstration agents 43 per cent, the specialists 1 per cent, and the local leaders 11 per cent.

Table 5.- Types of methods which influenced the adoption of farm and home practices and the extension agents involved

Item	Number	Percentage
Farms and homes reporting changed practices	340	74
Farms and homes influenced by publicity methods	171	50
Farms and homes influenced by personal-service methods	168	49
Farms and homes influenced by object-lesson methods	222	65
Farms and homes influenced indirectly	115	34
Improved practices adopted	1,171	
Practices influenced by publicity methods	392	34
Practices influenced by personal-service methods	385	33
Practices influenced by object-lesson methods	565	48
Practices influenced indirectly	215	18
Farms and homes mentioning influence of:		
County agricultural agent	295	87
Home demonstration agent	212	62
Specialists	10	3
Local leaders	58	17

Continued -

Table 5. - Continued.

Item	Number	Percentage
Practices adopted due to influence of:		
County agricultural agent	702	60
Home demonstration agent	506	43
Specialists	17	1
Local leaders	131	11

Practices Adopted and Extension Methods Responsible

The relative frequency with which the different extension methods were reported in connection with improved practices adopted is shown in Table 6. It will be noted that in the case of a large proportion of practices the influence of more than one method was mentioned. The three methods which were most effective were: Farm visits involving 35 per cent of the practices, method demonstrations 34 per cent, and general meetings 28 per cent. The indirect spread came next in order with 18 per cent of the practices changed due to this means. Other relatively important means were adult result demonstrations, junior result demonstrations, and bulletins, which were given some credit for 15, 10 and 9 per cent respectively of the improved practices reported.

A study of this table will show that the methods which carry their message through the written page were reported in connection with only slightly more than 1 out of 8 per cent of the practices changed. Those means and agencies which employ the spoken word in their application were involved in nearly 7 out of 10 of the practices adopted, while those of the objective type, which were mentioned as having influenced somewhat more than 6 out of 10 of the practices, were nearly as important.

Table 6. - Relative frequency with which extension methods were reported in connection with practices adopted

Method	Percentage of practices adopted
Farm visits	34.9
Method demonstrations	34.1
Meetings	28.4
Indirect	18.4
Adult demonstrations	14.8
Junior demonstrations	10.3
Bulletins	8.7
Office calls	3.0
News service	2.6
Extension schools	2.3
Exhibits	2.0
Circular letters9
Leader training8
Correspondence3

The percentage of farms reporting improved practices adopted in canning was twice as great as that for cotton varieties, the project next in importance. A complete list of these practices with the number and percentage of the farms visited which had adopted them is shown in descending order in Table 7.

Table 7. - Improved practices adopted

Practices	Number of farms reporting	Percentage of total farms
Canning	197	42.6
Cotton varieties	102	22.1
Boll-weevil control	89	19.3
Corn cultivation	85	18.4
Sewing	85	18.4
Cooking	73	15.8
Poultry	70	15.2
Cotton spacing and cultivation	65	14.1
Gardening	43	9.3
Fertilizer, use of	37	8.0
Swine	37	8.0
Corn varieties	21	4.5
Improved seed	19	4.1
Sanitation	19	4.1
Home mixed fertilizers	17	3.7
Marketing - general	15	3.2
Anthrax	11	2.4
Velvet beans	11	2.4
Lespedeza	10	2.2
Seed corn	10	2.2
Pruning	9	1.9
Soybeans	7	1.5
Cotton seed	7	1.5
Orchards	7	1.5
Dairying	7	1.5
Sweet potatoes	6	1.3
Miscellaneous crops	40	8.7
Miscellaneous home economics	34	7.4
Miscellaneous agriculture	24	5.2
Miscellaneous livestock	5	1.1

Other Factors Affecting the Adoption of Practices

In addition to the information obtained as to the improved practices adopted by the negro farmers and farm women, and the extension means and agencies which had been influential in bringing about these changes, data were collected which indicate the extent to which such natural and fundamental factors as condition of land occupancy, size of farm, distance from extension office, nature of roads, participation in extension activities, and contact with extension workers affect the progress of extension teaching.

Condition of land occupancy. - Only one-fourth of the farmers visited owned the farms they operated. The other three-fourths rented their farms, largely on a share-crop basis. (Table 8). It was found that a greater percentage of the owners than tenants had adopted improved practices. This was true of both the farm and home, although the amount of difference was not so great in the case of agricultural practices as it was for home economics practices. The average number of practices changed was also slightly higher on the farms operated by owners.

Table 8. - Condition of land occupancy in relation to farms changing practices

Group	Number of farms	Per cent of all farms	Per cent farms changing practice			Average number practices changed
			Agriculture	Home Economics	Any	
Owners	113	24	78	63	85	4.1
Tenants	349	76	61	38	70	3.2

Size of Farm. - For convenience in studying the effect which size has had upon the adoption of practices, the farms have been divided into three groups, the averages for which are 21, 45, and 99 acres of cultivated crops. Both the percentage of farms adopting practices and the average number of practices adopted per farm increased materially with the greater acreage. This was true for both farm and home practices. (Table 9).

Table 9. - Relation of size of farms to number of farms changing practices

Acres of cultivated crops	Number of farms	Average size acres	Per cent farms changing practices			Average number practices changed
			Agriculture	Home Economics	Any	
0-30 acres ...	268	21	57	37	66	2.8
31 - 60 acres.	126	45	71	51	83	3.6
61 and over ..	68	99	85	63	87	5.1

Distance from county extension office. - The effectiveness of extension work was not appreciably affected by the distance at which farms were located from the county extension office. (Table 10). Seventy-three per cent of the farms located less than 10 miles from the county extension office had adopted some improved practice as compared with 75 per cent of those 10 miles or more distant. This was offset, however, by the slightly higher average number of practices changed per farm by the group nearer the office. The percentage of farms adopting agricultural practices and those adopting home economics practices in the two groups compare similarly. The range of distance represented by the farms studied is too small to be of much significance.

Table 10. - Relation of distance from extension office to farms changing practices

Miles	Number of farms	Per cent of all farms	Per cent farms changing practices			Average number practices changed
			Agri-culture	Home Economics	Any	
Under 10 miles.	311	67	64	45	73	3.6
10 miles and over	151	33	68	44	75	3.0

Nature of roads. - The percentage of farms adopting improved practices and the average number of practices adopted per farm were greater for the farms situated on unimproved roads than in the case of farms on improved roads. (Table 11). Nature of roads is another factor having little influence upon the spread of improved practices through extension.

Table 11. - Nature of roads as related to farms changing practices

Group	Number of farms	Per cent of all farms	Per cent farms changing practices			Average number practices changed
			Agri-culture	Home Economics	Any	
Improved roads	127	27	58	34	64	3.2
Unimproved roads.	335	73	68	48	77	3.5

Participation in extension activities. - On thirty-seven per cent of the 462 negro farms visited some kind of formal extension activity such as a result demonstration or meeting had been conducted. (Table 12). Of the farms and homes cooperating in this way all but 4 per cent had definitely changed some practice. The average number changed was 4.3. An additional 30 per cent had attended some extension activity on a neighbor's farm or at a community center and of this number 83 per cent had made improvements creditable to extension. The average number of practices adopted, 3.1, was not as high as for the first group. The remaining 33 per cent had not participated in any way in extension activities and only 41 per cent reported the adoption of improved practices. The average number of practices was also still less for this group being 1.9. Participation in extension activities seems to have been an important factor in the adoption of improved practices and was of even greater importance in the case of the home than in the case of the farm.

Table 12. - Participation in extension activities as bearing on farms changing practices

Group	Number of farms	Per cent of all farms	Per cent farms changing practices			Average number practices changed
			Agriculture	Home Economics	Any	
Farms having extension activities on farm or in home ...	170	37	85	79	96	4.3
Other farms participating in extension activities	139	30	72	45	83	3.1
Farms not participating	153	33	39	6	41	1.9

Contact with extension workers. - As was the case of participation in extension activities, the relationship of contact with extension workers to changes in farm and home practices seems to have been an important one. (Table 13). Three-fourths of the 462 farms in the areas studied had made some contact with extension workers. Eighty-six per cent of this group had changed farm or home practices while only 36 per cent of the remaining one-fourth who had made no contacts had been reached. Only 4 per cent of the homes in the no-contact group had adopted new practices, in contrast to 58 per cent in the contact group.

Table 13. - Contact with extension workers as related to farms changing practices

Group	Number of farms	Per cent of all farms	Per cent farms changing practices			Average number practices changed
			Agriculture	Home Economics	Any	
Contact with extension workers	349	76	76	58	86	3.7
No contact with extension workers	113	24	34	4	36	1.7

Boys' and Girls' Club Work

Of the 462 farms studied 25 per cent either were or had been represented in club work at some time. (Table 14). Children of club age were found on fifty-seven per cent of the farms. Twenty-one per cent of the 616 boys and girls between the ages of 10 to 20 were in club work, and an additional 14 per cent had been in club work at some previous time. Only one club member out of ten was not in school. The average age of boys and girls enrolled in clubs in 1925 was 14.7. Ten per cent of all improved practices reported were changed due to junior result demonstrations.

Table 14. -

Extent and influence of 4-H club work

Item	Total
Farm and home records obtained	462
Percentage of families with children of club age .	57
Number of children of club age (10-20 years)	616
Percentage of families with boys and girls in club work (ever)	25
Percentage of boys and girls (10-20 years) in club work, (ever)	35
Percentage of boys and girls of club age in club work, 1925	21
Average age of boys and girls in club work, 1925 .	14.7
Percentage of 1925 club members not in school	9.7
Percentage of all practices adopted due to junior result demonstrations,.....	10

Attitude Toward Extension

An estimate was made of the family's attitude toward the extension service. Sixty-six per cent were considered to be favorable, 29 per cent indifferent, and only one farmer out of the 462 was opposed. No attitude was reported for the remaining 4.8 per cent of farmers. (Table 15).

Table 15. -

Attitude toward extension work

Item	Total
Number farm records obtained	462
Per cent of farms reported:	
Favorable	66
Indifferent	29
Opposed2
No attitude reported	4.8

Summary

This study contains information from 462 negro farms and homes in Georgia and Arkansas.

Seventy-four per cent of the farms and homes had adopted some improved practice as the result of extension. Sixty-five per cent had changed agricultural practices and 44 per cent home economics practices. Object lesson methods were mentioned in connection with the adoption of practices by 65 per cent of the farms; publicity methods 50 per cent, and personal-service methods 49 per cent. Thirty-four per cent had been reached indirectly. Eighty-seven per cent of the farms and homes reporting changed practices mentioned the influence of the county agricultural agents, 62 per cent the home demonstration agents, 3 per cent the subject-matter specialists, and 17 per cent the local leaders.

The method reported most frequently in connection with practices adopted was farm visits, followed in descending order by method demonstrations, general meetings, indirect, adult demonstrations, junior demonstrations, bulletins, office calls, news service, extension schools, exhibits, circular letters, leader training, and correspondence.

A higher percentage of farmers who were landowners had been reached by extension than of those who were tenants.

Both the percentage of farms adopting improved practices and the average number of practices adopted increased proportionately with the greater number of acres of land under cultivation.

The distance at which the farmstead was located from the county extension office did not seem to influence the effectiveness of extension.

Location on an improved road was not an advantage as indicated by the slightly higher percentage of the farms on unimproved roads reporting improved practices.

Attendance at meetings and participation in other extension activities were important factors as is indicated by the fact that 96 per cent of the farms cooperating in this way reported changed practices as compared with 41 per cent not participating.